

### **ABSTRACT OF THE INVENTION**

5 The present invention provides improved methods for forming and mounting a sleeve on a catheter shaft in order to form a distensible balloon catheter. The balloon is formed from a distensible sleeve that is treated to render one or both of its ends essentially non-distensible. The balloon is mounted on the catheter shaft by the non-distensible ends, without compromising the distensible operative portion of the balloon. The balloon may also be mounted using non-distensible tape or similar means to achieve a similar result.